BACK PAPER ODD/EVEN SEMESTER/ANNUAL EXAMINATION JULY-2026

Course Name: - B.Tech (AIFM/CE/EE/ME/ECE) **Semester: - 2nd**

Paper Name: - Programming for Problem Solving Using C **Paper Code: - NES-201**

Time - 3Hrs + 20 minutes per hour extra time for V.I. & examinees with writer. **Max Marks-70**

समय–3 घण्टे+ 20 मिनट प्रति घंटे अतिरिक्त–दृष्टिबाधित एवं सहलेखक परीक्षार्थियों के लिए। अधिकतम अंक–70

Instructions:

- The question paper consists of three sections namely A, B, C. All sections are compulsory.
- Section A- Each question carries **3 marks**. **All questions are compulsory**.
- Section B- Answer any **5 out of 7** given questions. Each question carries **7 marks**.
- Section C- Answer any **2 out of 3** given questions. Each question carries **10 marks**.

निर्देश:

- प्रश्न पत्र में तीन खण्ड अ, ब, व स हैं। सभी खण्ड अनिवार्य हैं।
- खण्ड–अ में प्रत्येक प्रश्न तीन अंक का है। सभी प्रश्न अनिवार्यहैं।
- खण्ड–ब में सात प्रश्नों में से किन्हीं पाँच प्रश्नो के उत्तर दें। प्रत्येक प्रश्न सात अंक का है।
- खण्ड–स में तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर दें। प्रत्येक प्रश्न10 अंक का है।

Section – A (खण्ड–अ)

Objective Questions (वस्तुनिष्ठप्रश्न)

1. Answer allthe following questions. 5x3 =15
निम्नलिखित सभी प्रश्न अनिवार्य हैं।

i) Which of the following is not a valid storage class?
a) automatic b) static
c) register d) extern

ii) What will be the output of the following?

```
main ()
{
int a = 'A';
printf ("%d", a);
}
```

a) 65 b) A
c) a d) the program will not compile as an integer variable is assigned constant.

iii) The best way to find an item in an unsorted implemented using an array list is with___.
a) Binary search b) Linear search
c) Random search d) Direct search

iv) Pointer can be used to achieve
a) call by function b) call by name
c) call by reference d) call by procedure

v) What is binary equivalent number of $(AB3)_{16}$
a) $(110010101011)_2$ b) $(101100111011)_2$
c) $(101010110011)_2$ d) $(101100110011)_2$

Scanned with OKEN Scanner

Section - B (खण्ड - ब)

Short Answer Questions (लघूत्तरीय प्रश्न)

2. Answer any five of the following questions. 5x7=35
निम्नलिखित में से किन्हीं पाँचप्र श्नों के उत्तर दें।

i. Define flowchart. Give the Symbols in a Flowchart. Write a program of multiplication of two integers using C language.

ii. Write a C program to find the reverse of a given number using while loop.

iii. Define Structure? Write the difference between structure and union.

iv. Write a C program to check given number is Even or Odd.

v. Explain various file handling operations in c. write a c program to read and display the contents of a file.

vi. Write the difference between Complier, Interpreter and Assembler.

vii. What is linear search? Write a program to implement linear search.

Section - C (खण्ड - स)

Descriptive Questions (विवरणात्मकप्रश्न)

3. Answer any two of the following question. 2x10=20
निम्नलिखित मे से किन्हीं दो प्रश्नों के उत्तर दें।

i) Mention the need of operators. Explain the various operators with example. Illustrate the operator precedence in detail.

ii) What is the difference between entry control loop and exit control loop? Write a program to check whether an alphabet is vowel or consonant?

iii) Convert following numbers as:

A) $(11011010010)_2$ to $(?)_8$

B) $(579)_{10}$ to $(?)_2$

C) $(572)_{10}$ to $(?)_8$

D) $(1101101110010101)_2$ to $(?)_{16}$

E) $(1064)_{10}$ to $(?)_{16}$

logical
Relative
Increment decrement

umr

Scanned with OKEN Scanner